

## Differential Interactions of a *Colletotrichum gloeosporioides* Isolate with Green and Red Pepper Fruits

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Differential interactions of *Colletotrichum gloeosporioides* isolate KG13 with green and red pepper fruits (*Capsicum annuum*) were found when it was inoculated on unwounded and wounded fruits. The isolate produced the typically necrotic, sunken anthracnose symptom on unwounded and wounded green fruits, and wounded red ones, but not on unwounded red ones. Appressorial formation of the fungus on the surfaces of compatible green fruits was higher than on incompatible red ones up to 12 h after inoculation. More and longer infection pegs from appressoria were produced on green than on red fruits. When cuticular wax layers of green and red fruits were removed by dipping in chloroform, red ones only produced larger lesions and more conidia than water-dipped controls did. However, differences in lesion diameter and conidial production were not observed between green and red fruits wounded by pin-pricking. In addition, concentrations of wax extracted from the surface of green and red fruits affected conidial germination and appressorial formation of the fungus. These findings suggest that the isolate KG13 of *C. gloeosporioides* may react differentially to green and red pepper fruits, probably due to the physical and chemical differences in cuticular layers of the fruits.

**KEY WORDS:** Anthracnose; *Capsicum annuum*; *Colletotrichum gloeosporioides*; fungal infection; *Glomerella cingulata*; wax.

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